SEQUENCE LISTING

Cohen, David I. <110> Tat-based Vaccine Compositions and Methods of Making and Using <120> Same 51311-00008 <130> <150> 60/553,733 2004-03-16 <151> 10/456865 <150> <151> 2003-06-06 <150> 09/636057 2000-08-08 <151> <160> 11 PatentIn version 3.2 <170> <210> 1 <211> 101 <212> PRT Human immunodeficiency virus type 1 <213> <400> 1 Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser 10 Gln Pro Lys Thr Ala Cys Thr Thr Cys Tyr Cys Lys Lys Cys Cys Phe 20 30 His Cys Gln Val Cys Phe Thr Lys Lys Ala Leu Gly Ile Ser Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Ala Pro Glu Asp Ser Gln Thr His Gln Val Ser Pro Pro Lys Gln Pro Ala Pro Gln Phe Arg Gly Asp 65 Pro Thr Gly Pro Lys Glu Ser Lys Lys Lys Val Glu Arg Glu Thr Glu Thr His Pro Val Asp 100 <210> <211> 303 <212> DNA Human immunodeficiency virus type 1 <213> <400> 2 atggagcccg tggaccctcg cctggagccc tggaagcacc cgggcagcca gcccaagacc 60 gcctgcacca catgttactg caagaagtgc tgcttccact gccaggtgtg cttcaccaag 120 180 aaggccttgg gcatcagcta cggccgcaag aagcgccggc agcgccgccg ggcccctgag Page 1

240

300

303

```
gacagccaga cccaccaggt gagccctccc aagcagcccg ctccacagtt ccgcggcgac
cctaccggtc ccaaggagag caagaagaag gtggagcgcg agaccgagac ccatcccgtc
gac
<210>
      3
<211>
      17
<212>
      PRT
      Human immunodeficiency virus type 1
<213>
<400> 3
Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser Gln Pro
Lys
<210>
       4
      21
<211>
<212>
       PRT
       Human immunodeficiency virus type 1
<213>
<400>
       4
Pro Cys Asp Trp Pro Leu Thr Pro Asp Pro Trp Val Tyr Ser Gly Ser
Gln Pro Lys Val Pro
            20
<210>
<211>
<212> PRT
<213> Simian immunodeficiency virus
<400> 5
Pro Leu Arg Glu Gln Glu Asn Ser Leu Glu Ser Ser Asn Glu Arg Ser
Ser Cys Ile Leu Glu Ala Asp Ala Thr Thr Pro
<210>
<211>
      11
<212>
      PRT
<213>
       Human immunodeficiency virus type 1
<400>
      6
Ser Asn Glu Arg Ser Ser Cys Glu Leu Glu Val
<210>
<211>
      16
<212>
       PRT
       Human immunodeficiency virus type 1
<213>
                                      Page 2
```

<400> 7 Cys Thr Thr Cys Tyr Cys Lys Lys Cys Cys Phe His Cys Gln Val Cys 10 15 <210> <211> 50 <212> DNA Human immunodeficiency virus type 1 <213> <400> 50 ccagtagatc ctagactaga gccctggaag catccaggaa gtcagcctaa 9 63 <210> <211> <212> DNA <213> Mus musculus <400> ccatgtgact ggcccctgac cccgcacccc tgggtatact ccgggggcca gcccaaagtg 60 63 CCC <210> 10 33 <211> <212> DNA Simian immunodeficiency virus <213> <400> 10 33 agcaacgagc ggagttcctg cgagttagag gtg <210> 11 <211> 98 PRT Artificial <213> <220> Modified immunostimulatory Tat <223> <400> 11 Met Glu Pro Ser Asn Glu Arg Ser Ser Cys Glu Leu Glu Val Pro Lys Thr Ala Cys Thr Thr Cys Tyr Cys Lys Lys Cys Cys Phe His Cys Gln 20 25 30 val Cys Phe Thr Lys Lys Ala Leu Gly Ile Ser Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Ala Pro Glu Asp Ser Gln Thr His Gln Val 60 Ser Pro Pro Lys Gln Pro Ala Pro Gln Phe Arg Gly Asp Pro Thr Gly 80 65 Pro Lys Glu Ser Lys Lys Lys Val Glu Arg Glu Thr Glu Thr His Pro Page 3

Val Asp